

Performance Counters

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V9.0

Overview

You can use performance counters to monitor Cora SeQUENCE applications and services. With Cora SeQUENCE V9.0, you can use performance counters to help you investigate issues related to the execution of workflow instances, and BRS (Background Runtime Service) or JES (Job Execution Service) performance.

How can the performance counters help you?

- **Redirect-Queue Length**
Use this counter to check BRS workload overtime. The counter updates each time BRS accesses the database to retrieve workflows that are waiting for redirection. Normally, the counter shows a relatively small number of workflows. If the counter constantly shows a great number of workflows, either you need to add more BRSs to the system, or check why there is such a long queue of workflows waiting for redirection.
- **Email Listener Queue Length**
Similar to Redirect-Queue Length, this counter can indicate that JES is overloaded or there is an issue blocking workflow processing.
- **Workflow Instance AVG Execution Time (milliseconds)**
Normally, this counter should show relatively low values. In case the value is high, you need to investigate if there are any bottlenecks interfering with workflow processing.
- **Executing Workflows**
This counter helps you understand the number of concurrent Flowtime users and if JES or BRS are overloaded.

Performance counters details

Counter	Category	Description	Type
Redirect Queue Length	Cora SeQUENCE BRS	Number of workflow instances that BRS needs to execute. The counter changes when the BRS redirect interval elapses.	NumberOfItems 32
Email Listener Queue Length	Cora SeQUENCE JES	Number of emails retrieved by JES that need to be processed. The counter changes when the JES email listener interval elapses. Note: One counter represents all email listeners processed by the same JES.	NumberOfItems 32
Workflow Instance AVG Execution Time (milliseconds)	Cora SeQUENCE	The average time that it takes to execute a workflow instance.	AverageTimer3 2 AverageBase

Counter	Category	Description	Type
Executing Workflows	Cora Sequence	Number of workflow instances currently being executed.	NumberOfItems 32

Install performance counters manually

The performance counters are automatically installed with the application deployment scripts, but you can manually install them, if required.

1. To manually install performance counters, run this PowerShell function: [Register-CoraSeSequencePerformanceCounters](#).

Disable performance counters

Performance counters are enabled by default. You can set up a key in the application's configuration file to disable performance counters.

Key	Values
PNMsoft.Sequence.Diagnostics.PerformanceCounters.Enabled	False: disables the counter True: enables the counter

NOTE

The key value is "true" as long as the key does not exist in the config file, or you have not changed its value to "false".

Procedure

1. To disable or enable a counter, add the `PNMsoft.Sequence.Diagnostics.PerformanceCounters.Enabled` key to the `appSettings` section of the relevant configuration file, and set up its value as required.

To disable this counter	Configure the key in this file
Redirect Queue Length	PNMsoft.Sequence.WindowsServices.BRS.exe.config
Email Listener Queue Length	PNMsoft.Sequence.Jobs.Host.exe.config
Workflow Instance AVG Execution Time	Flowtime and Administration Web.config files
Executing Workflows	Flowtime and Administration Web.config files

